PLATTE HUTTERIAN BRETHREN, INC. Platte, SD – VAPG Planning Grant

Outline Of Need: Due to increased energy costs, the Platte Hutterian Brethren had to discontinue irrigation several years ago. With the costs of inputs today, dry land farming is no longer reliable or profitable on a regular basis. Without energy, they will be unable to continue their farming operation. They feel something has to be done to offset climate change and rising energy bills. This Colony is comprised of 26 farm families.

How Rural Development Helped: We worked with the

Colony; SARC International – a consulting group working with the Colony; and Ries Engineering to develop a VAPG Planning Grant Application for \$99,369.00 to explore using wind power to pump water from the Missouri River up a 450' bank to then be "stored" energy by hydro-electric generation methods. The potential energy could be easily converted to electrical energy for use during "peak" periods or for times when the wind wasn't blowing. The water available would also meet the irrigation needs. This project was seeking how to assess available technologies working together to provide stable, renewable, on-farm energy resources, beginning with a plentiful but unpredictable wind supply.

The Results: The study identified five separate tools to use for alternative energy production. During the course of the investigation, two more tools were added that offer significant promise. These studies include:

- 1. Wind-powered electric generation
- 2. Stored hydro-electric generation
- 3. Solar applications
- 4. Bio-diesel production
- 5. Hydrogen based fuel use
- 6. Geothermal (ground source) heating
- 7. Co-generation (generate electricity from heating fuel, and use all remaining heat)

The marketing plan for this system involves Establishing new paradigms for new products that result from the "greening" of energy usage and production.

Pictured at right – front row left to right: Sherrie Lewis, Area Specialist USDA-Rural Development Yankton; Joseph Waldner, President Platte Hutterian Brethren, Inc.; Dale Stahl, Secretary Platte Hutterian Brethren, Inc.; Margaret Bobertz, President, Thule Group of Consultants, Ltd.; back row left to right: Trace Davids, Area Director USDA-RD Sioux Falls; John Ries, PE of Ries Engineering; and William F. Tooley, General Manager, SARC International.



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